

Claims

What is claimed is:

1. A message protrusion for use in a message pad structure
5 having a chamber accessible through an opening on a top surface of
the message pad structure, the message protrusion comprising:

a hemispherical top movably disposed on the top surface;

and,

a root section coupled to the hemispherical top through
10 the opening and movably disposed in and limited by the chamber.

2. The message protrusion of claim 1, wherein each message
protrusion further comprises a connecting pillar that extends
downward from the hemispherical top and couples to the root section.

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3. The message protrusion of claim 1, wherein the root
section comprises a hemispherical bottom coupled to the connecting
pillar, the hemispherical bottom having a diameter greater than the
diameter of the opening.

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4. The message protrusion of claim 1, wherein the root
section comprises a hemispherical bottom coupled to the connecting
pillar, the hemispherical bottom having an arresting ring disposed
at a bottom portion of the connecting pillar.

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5. The massage protrusion of claim 4, wherein the arresting ring having an outside diameter greater than the diameter of the opening.

5 6. The massage protrusion of claim 1, further comprising an elastic tension member displaced in the chamber and supporting the root section.

7. The massage protrusion of claim 1, wherein the root
10 section has a spherical shape coupled to the hemispherical top through a neck section.

8. The massage protrusion of claim 1, wherein the root
section has a water-drop shape with a tapered portion coupled to the
15 hemispherical top through a neck section.

9. The massage protrusion of claim 1, wherein the hemispherical top has a magnetic member embedded therein.

20 10. The massage protrusion of claim 1, wherein the hemispherical top is made of a ceramic material.

11. The massage protrusion of claim 1, wherein the hemispherical top is coated with a far infrared converting material.

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12. The massage protrusion of claim 1, wherein the hemispherical top of the massage protrusion includes a groove.

13. The massage protrusion of claim 1, wherein the hemispherical top of the massage protrusion includes an opening on a top surface.

5 14. A massage pad structure comprising:

a mat having a plurality of through holes;

a pad plate;

a middle layer sandwiched between the mat and the pad plate and having a plurality of chambers, each of the plurality of chambers accessible through a through hole of the plurality of through holes;

a plurality of massage protrusions, each massage protrusion having:

a hemispherical top movably disposed on the mat;

15 a root section coupled to the hemispherical top through the through hole and movably disposed in and limited by a chamber of the plurality of chambers.

15. The massage pad structure of claim 14, wherein each
20 massage protrusion further comprises a connecting pillar that extends downward from the hemispherical top, passes through the through hole and couples to the root section.

16. The massage pad structure of claim 14, wherein the root
25 section comprises a hemispherical bottom coupled to the connecting pillar, the hemispherical bottom having a diameter greater than the diameter of the through hole.

17. The massage pad structure of claim 14, wherein the root section comprises a hemispherical bottom coupled to the connecting pillar, the hemispherical bottom having an arresting ring disposed
5 at a bottom portion of the connecting pillar.

18. The massage pad structure of claim 17, wherein the arresting ring having an outside diameter greater than the diameter of the through hole.

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19. The massage pad structure of claim 14, further comprising an elastic tension member displaced in the chamber and supporting the root section.

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20. The massage pad structure of claim 14, wherein the root section has a shape selected from the collection of a water-drop shape and a spherical shape, with its upper section coupled to the hemispherical top through a neck section.

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21. The massage pad structure of claim 14, wherein the hemispherical top has a magnetic member embedded therein.

22. The massage pad structure of claim 14, wherein the hemispherical top is made of a ceramic material.

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23. The massage pad structure of claim 14, wherein the hemispherical top is coated with a far infrared converting material.

24. The massage pad structure of claim 14, further comprising a dirt isolating layer covering the plurality of massage protrusions.

5 25. The massage pad structure of claim 14, wherein the pad plate includes an attachment layer disposed on a lower surface.

26. The massage pad structure of claim 14, wherein the hemispherical top of the massage protrusion includes a groove.

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27. The massage pad structure of claim 14, wherein the hemispherical top of the massage protrusion includes an opening on a top surface.

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28. A method comprising the steps of:

providing a massage pad structure comprising a top surface with at least one opening for accessing a chamber in the massage pad structure; and,

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inserting a massage protrusion into the chamber through the opening, the massage protrusion having a top portion being movably disposed on the top surface and further having a bottom portion being retained in the chamber.